

Sac Metro Fire District

Plan Submittal Requirements for Rack Storage Plans

I Purpose

To advise architects, engineers and contractors what minimum information is required for plan review approval. All required information listed below shall be on the plans.

II Scope

The following requirements shall apply to all new buildings, tenant improvements, and building additions having rack, shelf, solid piled, or pallet storage 12 feet or higher. For rack storage these requirements apply to all racks having the top rack at 8 feet or higher.

Not all requirements listed apply to every submittal. If questions arise, contact the District plan reviewer to determine what information may not be required.

III References

CBC and CFC are in reference to the 1998 California Building Code and 1998 California Fire Code.

See NFPA 13 1-4.8 & 1-4.9 and CFC Article 2 for storage definitions.

III General

- A. Rack storage plans shall be submitted separately from architectural plans and therefore require a separate application and additional plan review fees.
- B. Plans will not be accepted for review until the plan review fee is paid in full. Fees include the initial review and one resubmittal. Additional resubmittals necessary for approval require additional fees.
- C. The District's plan review turn around time is approximately 30 working days.
- D. Plans may be "expedited" for an additional fee. Expedited plans are guaranteed a 10 working day turn around time. Please see FPS 441.106 for information and requirements for expedited plans.
- E. Plans shall be wet signed by the Engineer of Record.
- F. A minimum of two complete sets of plans shall be submitted each time plans are submitted or resubmitted.

IV Plans shall provide the following information:

- A. Floor plan of building showing location and square feet of all storage areas. Square feet of storage area includes the actual square feet of the racks as well as the aisles between the racks.
- B. Location and dimensions of fire access doors. CFC 8102.6.2
- C. Commodity classification of all items stored. CFC 8101.4 & NFPA 13 Table A-2-2.3
- D. Packing arrangement I.E. indicate if items are encapsulated or packaged in cardboard or foam.
- E. Detail showing dimensions of racks, number of tiers, and whether they are single, double, or multiple row racks.
- F. Detail showing transversal and longitudinal flue spaces. CFC 8104.3
- G. Indicate if solid shelving will be used.
- H. Aisle widths between racks. CFC 8102.10
- I. Storage height (storage height is the height of the top rack plus four feet)
- J. Clearance (distance) from top of storage to sprinkler deflector. NFPA 13
- K. Location of small hose stations, along with length and diameter of hoselines. CFC 8102.9
- L. Design density of sprinkler system. NFPA 13
- M. Type of fire detection system (smoke or heat detection).
- N. Any items such as exit signs and emergency illumination that are deferred because their placement is dependent upon rack location shall be shown.
- O. If in-rack sprinklers are installed, indicate the number of levels of sprinklers, head spacing, and head temperature.
- P. Floor plan showing smoke vent locations and dimensions. CFC 8102.7
- Q. Smoke vent area to floor area ratio calculations.
- R. Temperature rating of smoke vent fusible links and a note indicating that smoke vents shall be automatic and manually operated.
- S. Floor plan showing location and dimensions of curtain boards. CFC 8102.8
- T. Indicate if storage area is accessible to the public. CFC Table 81-A

V The following apply to Resubmittals:

- A. All changes shall be clouded and indicated with a delta that has a corresponding revision number and date.
- B. Plan review comments shall be addressed in the column on the plan review letter or in a separate letter specifically addressing plan review comments.
- C. Indicate how the plan review comment was addressed and on what sheet the change or correction was made.

- D. All plan review comments must be addressed in order for plans to be approved. If there are any questions regarding code interpretation or the applicability of the code section cited, contact the District plan reviewer to discuss the issue prior to resubmittal.